

**DISK DRIVE HAVING A DISK INCLUDING A SERVO BURST PATTERN HAVING  
A NORMAL SERVO BURST FIELD AND A QUADRATURE SERVO BURST FIELD**

**ABSTRACT**

A disk drive has a sampled servo system controller and a disk. The disk has a plurality a plurality servo burst fields, the plurality of servo burst field including first and second normal burst fields, and first and second quadrature burst fields. A portion of the first quadrature burst field is circumferentially contiguous with the first normal burst field and spans a portion of a radial extent of the first normal burst field. The second normal burst field is radially aligned with and away from the first normal burst field and spans a portion of a radial extent of the first quadrature burst field. The second quadrature burst field is radially aligned with and away from the first quadrature burst field and spans a portion of a radial extent of the second normal burst field. The first normal burst field and the first quadrature burst field have a same first phase and the second normal burst field and the first quadrature burst field have a same second phase. The first phase is different than the second phase.